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♦EPA NATIONAL AIR POLLUTANT EMISSION TRENDS, 1900 - 1998



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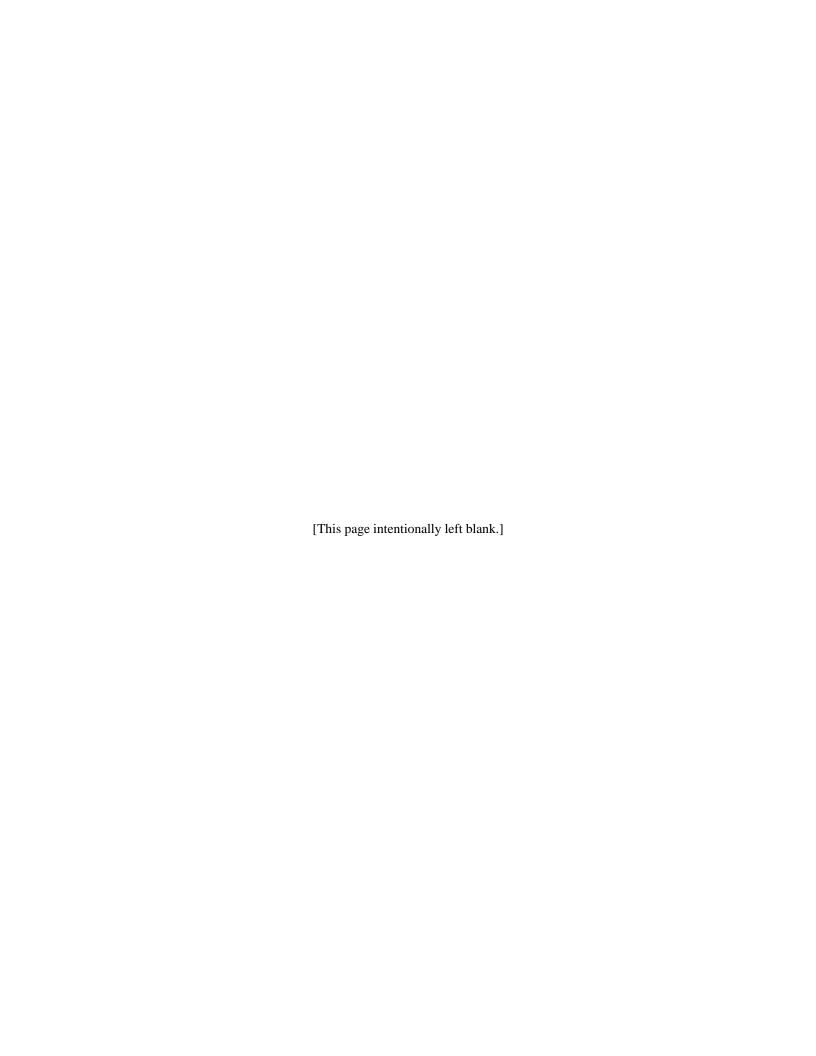
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Foreword

This document presents the most recent estimates of national emissions of the criteria air pollutants. The emissions of each pollutant are estimated for many different source categories, which collectively account for all anthropogenic emissions. The report presents the total emissions from all 50 States and from each EPA region in the country. These estimates are updated annually.

This report tracks changes in national emissions since passage of the Clean Air Act Amendments of 1990. The emission trends are the net effect of many factors, including changes in the nation's economy and in industrial activity, technology, consumption of fuels, traffic, and other activities that cause air pollution. The trends also reflect changes in emissions as a result of air pollution regulations and emission controls. These reports will serve as a measure of our nation's progress in reducing air pollution emissions as a result of mandatory and voluntary controls and of continuous changes in national activity.

In addition to the extensive coverage of criteria air pollutant emissions from anthropogenic sources in the United States, this year's report continues to provide limited coverage of State-derived biogenic, greenhouse gas, and air toxic emissions, and emissions for Canada and Europe. Preliminary estimates are presented for the years 1990 through 1998. Final estimates (including refinements to the data used to estimate emissions) will be presented in future reports.



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Acronyms and Abbreviations

AIRS Aerometric Information Retrieval System

AIRS/AFS AIRS Facility Subsystem ARD Acid Rain Division

BACT best available control technology

BEA U.S. Department of Commerce, Bureau of Economic Analysis

BEIS2 Biogenic Emission Inventory System version 2

BTS U.S. DOT, Bureau of Transportation

Btu British thermal unit CAA Clean Air Act

CAAA Clean Air Act Amendments of 1990
CEM continuous emission monitor(ing)

CFCs chloroflurocarbons

CH₄ methane

CHIEF Clearinghouse for Inventories and Emission Factors

CNG compressed natural gas
CO carbon monoxide
CO₂ carbon dioxide

CORINAIR Coordination of Environmental Air

DOE Department of Energy

DOT Department of Transportation EEA European Environment Agency

EFIG EPA, OAQPS, Emission Factor and Inventory Group

EGAS Economic Growth Analysis System

EIA U.S. DOE, Energy Information Administration EIIP Emission Inventory Improvement Program

EMEP Cooperative Programme for Monitoring and Evaluation of the Long Range Transmission of Air

Pollutants in Europe

EPA U.S. Environmental Protection Agency

ES Executive Summary

ETC/AEM European Topic Center on Air Emissions

ETS Emissions Tracking System
FAA Federal Aviation Adminstration

FIPS Federal Information Processing Standards

FIRE Factor Information Retrieval

FR Federal Register
FTP Federal Test Procedure

GACT generally achievable control technology

GCVTC Grand Canyon Visibility Transport Commission

GDP gross domestic product gpg grams per gallon

gpm grams per mile
GSP gross State product
HAPs hazardous air pollutants
HCFC hydrochloroflurocarbon
HDDV heavy-duty diesel vehicle
HDGV heavy-duty gasoline vehicle

HFCs hydroflurocarbons ID identification (code)

IPCC Intergovernmental Panel on Climate Change

LDDT light-duty diesel truck
LDDV light-duty diesel vehicle
LDGT light-duty gasoline truck
LDGV light-duty gasoline vehicle

LDT light-duty truck
LDV light-duty vehicle
LPG liquefied petroleum gas

MACT maximum available control technology
MECs Manufacturing Consumption of Energy
MMTCE million metric tons carbon-equivalent

 $\begin{array}{ll} MW & megawatts \\ N_2O & nitrous \ oxide \\ NAA & nonattainment \ area \end{array}$

NAAQS National Ambient Air Quality Standard

NADB National Allowance Data Base

NAPAP National Acid Precipitation Assessment Program

NEC not elsewhere classified

NET National Emissions Trends (inventory)

NH₃ ammonia

NMVOC nonmethane volatile organic compounds

 $\begin{array}{ccc} NO & \text{nitric oxide} \\ NO_2 & \text{nitrogen dioxide} \\ NO_x & \text{nitrogen oxides} \end{array}$

NPI National Particulates Inventory
NSPS New Source Performance Standards

NTI National Toxics Inventory

 O_3 ozone

OAQPS EPA, Office of Air Quality Planning and Standards

OMS EPA, Office of Mobile Sources

OTAQ EPA's Office of Transportation and Air Quality

OTAG Ozone Transport Assessment Group

Pb lead

PCB polychlorinated biphenyl PEI periodic emission inventory

PFC perfluorocarbon
PM particulate matter

 PM_{10} particulate matter less than 10 microns in diameter PM_{25} particulate matter less than 2.5 microns in diameter

POM polycyclic organic matter

ppm parts per million

psi pounds per square inch
QA quality assurance
QC quality control

RACT reasonably available control technology REMI Regional Economic Models, Inc.

RFG reformulated gasoline

RSD Regulatory Support Document

RVP Reid vapor pressure
SCC source classification code
SEDS State Energy Data System

SF₆ sulfur hexafluoride

SIC Standard Industrial Classification (code)

SIP State Implementation Plan

SO₂ sulfur dioxide SUV sport utility vehicle TP total particulates tpy tons per year

TRENDS The Representative Emissions National Data System

TRI Toxic Release Inventory

TSDF hazardous waste treatment, storage, and disposal facility

TSP total suspended particulate matter
TTN Technology Transfer Network

UNFCCC United Nations Framework Convention on Climate Change

U.S. United States

USDA U.S. Department of Agriculture

USFS USDA Forest Service VMT vehicle miles traveled

VOC volatile organic compound(s)

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